

**HEADQUARTERS
FLORIDA WING, CIVIL AIR PATROL
United States Air Force Auxiliary
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FLIGHT CREW INFORMATION FILE 99-02

FROM: DOV

SUBJECT: Preflight and Postflight Operations

The following guidance is to provide for improved ground operations in CAP flight operations. Numerous events during 1998 and 1999 outline the need for increased ground operations awareness while conducting CAP flight operations. Incidents involving taxiing caused serious damage to aircraft in the wing and throughout the nation and also lack of appropriate maintenance data caused the grounding of corporate aircraft. Recently, lack of proper pre-flight has involved the operation of aircraft that were not airworthy.

PREFLIGHT PROCEDURES

- 1) Florida Wing Flight Operations are governed by CAPR 60-1 dated 1 August 1998, FLWG Supplement 1 to CAPR 60-1 dated 1 August 1999, and FAR's. Thorough knowledge and review of these regulations can prevent violations. The pilot in command (PIC) should review all applicable regulations during the preflight planning process. Also, the PIC should verify the weather data with Flight Service Station, calculate weight and balance, takeoff and landing distance for all airports expected to be used during flight. If available, the PIC should also use NOS or Jeppesen Instrument Approach plates to familiarize themselves with the airports.
- 2) File the appropriate flight plan i.e. IFR/VFR, CAP Flight Plan (CAPF 84/104). In the flight plan, remember to use the identifier of **CPF XXX** and include CAPFLIGHT and the aircraft N number in the remarks section.
- 3) **Obtain flight release from a local Flight Release Officer.** The aircraft-scheduling officer may not necessarily be an authorized flight release officer.
- 4) Upon arrival at the airport, check the general condition of the aircraft. While walking out to the aircraft, the PIC should note any obstacles, structure, potholes, other aircraft, or any other objects that may damage the aircraft. Also check condition of radio antennas, many aircraft will have antennas covered with grease degrading their range.
- 5) After opening the aircraft, the PIC should ensure that all documents (Airworthiness Certificate, Registration, Operation Handbook, Weight & Balance) and the Aircraft Information File (AIF) is present. **The PIC should review it to ascertain that the aircraft is in an**

airworthy condition. The aircraft should have in the AIF, the current annual/100hr, Pitot-static check, ELT battery check, transponder check, and current VOR check. It is the PILOT IN COMMAND's responsibility to ensure that the aircraft meets the FAR requirements. This information should be easily available in the AIF. If the AIF does not meet the requirement of CAPR 60-1 and FLWG Supplements, report this discrepancy to the aircraft maintenance officer and Wing Operations Staff.

6) Equipment such as headsets, navigation clipboards, and pencils should not be placed on the top of the instrument panel. Over time this may scratch the windshield, reducing forward visibility.

7) Perform preflight per the Pilot Operating Handbook using the approved checklist.

COCKPIT MANAGEMENT

1) Ensure that all equipment, bags, etc. are neatly arranged and available for use when needed.

2) The pilot's seat should be adjusted so that the pilot's knees are bent slightly with the balls of the feet placed on the bottom of the rudder pedals with the heels on the floor. If the pilot's seat cannot be adjusted to provide for proper visibility and aircraft control, cushions should be used. Seat cushions are readily available from a number of sources such as pilot supply stores and marine stores. **Sitting too close to the instrument panel during IMC can cause instrument crosscheck (scan) problems. Ensure the seat is in a locked position.**

ENGINE START AND TAXIING

1) Engine starts should be accomplished using the appropriate checklist. Use your crewmembers to assist in the reading of the checklist or cross-checking items.

2) Prior to engine start, the crew should look around in all directions to ensure that nothing is in the vicinity of the propeller. Also, the PIC should ensure that debris will not be picked up by the propeller blast. **FOD (Foreign Object Damage) can be prevented by a thorough check of the ground around the aircraft**

3) After engine start, the oil pressure should rise to operating specification within 30 seconds (in summer) or 60 seconds (in winter); also adjust and check the intercom for operations.

4) Prior to taxiing, obtain the proper ATC clearances or announce intentions on CTAF and observe for any obstructions. If you can see the aircraft's respective shadow and there is sunlight between it and the obstruction; then the aircraft and the object are clear of each other. **If there is a doubt, use a wing walker, FBO line person, or shut the aircraft down and move to a clear area by tow bar.**

5) Control taxi speed by using the engine power. Reduce the power to idle and then brake the aircraft. This will reduce wear on the brakes and prevent loss of braking or positive control. The taxi speed should be such that when the throttle is closed, the airplane may be stopped promptly. Instructor/Check Pilot should ensure that the brakes are working on both sides when conducting any dual operations.

6) During runup, observe clearance from taxi lights and other obstructions. The PIC should have his/her eyes focused outside on the ground operations. Looking at charts, talking with passengers, etc. may cause a distraction, which can damage a propeller, tire, or other parts of the aircraft.

7) Observe wake turbulence avoidance procedures behind large aircraft. The jet blast behind a B-757 and B-767 at 50 feet is 43 knots or higher at idle power.

POSTFLIGHT

1) Continue to operate the aircraft safely and use the checklist until the engine is shutdown. Many pilots tend not to use the checklist after landing.

2) Secure the aircraft in its parking spot. Install the control/radio lock and Pitot-static tube cover. Remove any trash and carry on equipment. Close all doors, windows, and vents. Some corporate aircraft have been found with water inside the aircraft due to open vents during a rainstorm.

3) Attach the tie down ropes using the double wind knot and also install chocks. Secure the aircraft without overstressing it.

4) Complete a postflight inspection of the aircraft. Check for loose fasteners/screws, oil/fuel leaks, damage, etc. Complete all necessary aircraft paperwork (i.e. Florida Wing Form 43 Flight Log). Write up any discrepancies in the aircraft maintenance log and report it to the appropriate maintenance officer.

5) **CLOSE YOUR FLIGHT PLAN.** Call your flight release officer and aircraft-scheduling officer. Report total time.

As CAP Pilots and aircrew, we need to remember that the preflight and postflight operations are just as important as the actual flying operations. Cautious operation on the ground can mean the difference between a safe flight and a seriously damaged aircraft. **Remember, you're not done flying until the aircraft is tied down.**

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